

## RK1808 I/O LIST For EVB

Version	Update time	Modify content	Author
V1.0	2018.11.29	The first version	rzf

## GPIO POWER TYPE NOTE

Gpio type	Power domain	Voltage
1.8V only	PMUIO1,ADC_AVDD	1.8V
1.8V or 3.3V	PMUIO2, VCCIO0, VCCIO1, VCCIO2, VCCIO3, VCCIO4, VCCIO5, VCCIO6, VCCIO7	1.8V or 3.3V

# RK1808 IO LIST V10

Pin No	Pin Name	Func1	Func2	Func3	Func4	Pin Type	I/O Def	I/O Pull	Pull Resistor (K ohm)	Nom Pull Resistor (K ohm)	Drive Current (mA)	Default Drive (mA)	Description	RK1808+LPDDR3 EVB Pin Distribution	RK1808+DDR3 EVB Pin Distribution
<b>PMUIO1 (1.8V only)</b>															
AW23	NPOR	NPOR				I	I	fix up	56-89	71		2	System reset input		
AV22	GPIO0_A0/REF_CLKO	GPIO0_A0	CLK_OUT_WIFI			I/O	I	down	56-88	70.9	2, 4, 8, 12	4	24M clk output for wifi	REF_CLKO	REF_CLKO
AU21	GPIO0_A1/TSADC_SHUT_M1	GPIO0_A1	TSADC_SHUTM1			I/O	I	z			2, 4, 8, 12	2	PMIC interrupt input	PMIC_INT_L	PMIC_INT_L
AN19	GPIO0_A2/PCIE_BUTTONRST	GPIO0_A2	PCIE_BUTTONRST			I/O	I	down	56-89	70.9	2, 4, 8, 12	2	EFUSE digital I/O supply,default connect to VSS	EFUSE_EN_H	EFUSE_EN_H
AV20	GPIO0_A3/PCIE_CLKREQN_M0/SDMMC0_DET	GPIO0_A3	SDMMC0_DET	PCIE_CLKREQN_M0		I/O	I	up	56-89	71	2, 4, 8, 12	2	SDMMC0 detect input	SDMMC0_DET_L	SDMMC0_DET_L
AW17	GPIO0_A4/PMIC_SLEEP	GPIO0_A4	PMIC_SLEEP			I/O	I	down	56-88	70.9	2, 4, 8, 12	2	PMIC sleep control output	PMIC_SLEEP_H	PMIC_SLEEP_H
AL17	GPIO0_A5/PCIE_PERST_M0	GPIO0_A5	PCIE_PRSTN_M0			I/O	I	up	56-89	71	2, 4, 8, 12	2	NPU sleep control output	NPU_SLEEP_H	NPU_SLEEP_H
AW21	GPIO0_A6/TSADC_SHUT_M0/TSADC_SHUTORG	GPIO0_A6	TSADC_SHUTM0	TSADC_SHUTORG		I/O	I	z			2, 4, 8, 12	2	Over-temperature protection output	TSADC_SHUT_L	TSADC_SHUT_L
AR21	GPIO0_A7/PCIE_WAKE_M0	GPIO0_A7	PCIE_WAKE_M0			I/O	I	up	56-89	71	2, 4, 8, 12	2	led enable control for mic board	MIC_LED_EN_H	MIC_LED_EN_H
AV24	OSC_BPASS	OSCBYPASS				I	I	z					crystal select define	Connect to gnd	Connect to gnd
<b>PMUIO2 (1.8V or 3.3V)</b>															
AW19	GPIO0_B0/I2C0_SCL	GPIO0_B0	I2C0_SCL			I/O	I	up	39-65	51	2, 4, 8, 12	2	I2C serial port 0,for Pmic,need external pull-up	I2C0_SCL_PMIC	I2C0_SCL_PMIC
AU13	GPIO0_B1/I2C0_SDA	GPIO0_B1	I2C0_SDA			I/O	I	up	39-66	51	2, 4, 8, 12	2	I2C serial port 0,for Pmic,need external pull-up	I2C0_SDA_PMIC	I2C0_SDA_PMIC
AU15	GPIO0_B2/UART0_TX	GPIO0_B2	UART0_TX	PMU_DEBUG0		I/O	I	down	39-65	51	2, 4, 8, 12	2	RGMII phy reset	EPHY_RST_3V3IO	EPHY_RST_3V3IO
AW9	GPIO0_B3/UART0_RX	GPIO0_B3	UART0_RX	PMU_DEBUG1		I/O	I	down	39-65	51	2, 4, 8, 12	2	Headphone insert detect input	PHONE_DET_H	PHONE_DET_H
AR15	GPIO0_B4/UART0_CTS	GPIO0_B4	UART0_CTS	PMU_DEBUG2	PMU_DEBUG_SOUT	I/O	I	up	39-65	51	2, 4, 8, 12	2	touch panel reset output	TP_RST_L	TP_RST_L
AV10	GPIO0_B5/UART0_RTS/TEST_CLK1	GPIO0_B5	UART0_RTS	TEST_CLK1		I/O	I	up	39-65	51	2, 4, 8, 12	2	touch panel interrupt input	TP_INT_L	TP_INT_L
AU9	GPIO0_B6/PCIE_PERST_M1	GPIO0_B6	PCIE_PERST_M1L			I/O	I	up	39-65	51	2, 4, 8, 12	2	charge status input	CHG_DET_L	PCIE_PERST#
AV14	GPIO0_B7/PWM0/OTG_DRV	GPIO0_B7	PWM_0	OTG_DRV		I/O	I	down	39-65	51	2, 4, 8, 12	2	otg port power enable	OTG_DRV_H	CHG_DET_L
AN13	GPIO0_C0/I2C1_SCL	GPIO0_C0	I2C1_SCL		PMU_DEBUG5	I/O	I	down	39-65	51	2, 4, 8, 12	2	I2C serial port 1,for touchscreen,need external pull-up	I2C1_SCL_TP	I2C1_SCL_TP
AV12	GPIO0_C1/I2C1_SDA	GPIO0_C1	I2C1_SDA			I/O	I	down	39-65	51	2, 4, 8, 12	2	I2C serial port 1,for touchscreen,need external pull-up	I2C1_SDA_TP	I2C1_SDA_TP
AW13	GPIO0_C2/CLKIO_32K	GPIO0_C2	CLK_INOUT_32K			I/O	I	z	39-65	51	2, 4, 8, 12	2	32KHz clock input	CLKOUT_32K	CLKOUT_32K
AV18	GPIO0_C3/PWM1/UART3_TX	GPIO0_C3	PWM_1	UART3_TX	PMU_DEBUG3	I/O	I	down	39-65	51	2, 4, 8, 12	2	LCD panel backlight brightness control output	DFTJTAG_TCK/PWM1_LCD_BL	DFTJTAG_TCK/PWM1_LCD_BL
AW11	GPIO0_C4/PWM3/UART3_RX	GPIO0_C4	PWM_3	UART3_RX	PMU_DEBUG4	I/O	I	down	39-65	51	2, 4, 8, 12	2	LCD panel backlight enable control output	DFTJTAG_TDO/LCD_PWREN_H	DFTJTAG_TDO/LCD_PWREN_H
AV16	GPIO0_C5/PCIE_WAKE_M1/PWM2	GPIO0_C5	PCIE_WAKE_M1	PWM_2		I/O	I	down	39-65	51	2, 4, 8, 12	2	no used	DFTJTAG_TDI	DFTJTAG_TDI
AN15	GPIO0_C6/PCIE_CLKREQN_M1/UART3_CTS	GPIO0_C6	PCIE_CLKREQN_M1	UART3_CTS		I/O	I	down	39-65	51	2, 4, 8, 12	2	sensor interrupt input/Pcie clkreq	SENSOR_INT	SENSOR_INT/Pcie_clkreq
AR13	GPIO0_C7/UART3_RTS	GPIO0_C7		UART3_RTS		I/O	I	down	39-65	51	2, 4, 8, 12	2	mipi camera enable	MIPICAM_PDN	MIPICAM_PDN
AW15	DFTJTAG_TRSTN	DFTJTAGTRSTN				I/O	I	fix down	39-65	51		2	no used	no used	no used
AR9	DFTJTAG_TMS	DFTJTAGTMS				I/O	I	fix up	39-65	51		2	no used	no used	no used
<b>VCCIO0 (1.8V or 3.3V)</b>															
E27	GPIO1_A0/EMMC_D0/SFC_SIO0	GPIO1_A0	EMMC_D0	SFC_SIO0		I/O	I	up	39-65	51	2, 4, 8, 12	8	Date0 of EMMC	EMMC_D0/SFC_SIO0	EMMC_D0/SFC_SIO0
B28	GPIO1_A1/EMMC_D1/SFC_SIO1	GPIO1_A1	EMMC_D1	SFC_SIO1		I/O	I	up	39-65	51	2, 4, 8, 12	8	Date1 of EMMC	EMMC_D1/SFC_SIO1	EMMC_D1/SFC_SIO1
A29	GPIO1_A2/EMMC_D2/SFC_SIO2	GPIO1_A2	EMMC_D2	SFC_SIO2		I/O	I	up	39-65	51	2, 4, 8, 12	8	Date2 of EMMC	EMMC_D2/SFC_SIO2	EMMC_D2/SFC_SIO2
B30	GPIO1_A3/EMMC_D3/SFC_SIO3	GPIO1_A3	EMMC_D3	SFC_SIO3		I/O	I	up	39-65	51	2, 4, 8, 12	8	Date3 of EMMC	EMMC_D3/SFC_SIO3	EMMC_D3/SFC_SIO3
A31	GPIO1_A4/EMMC_D4/SFC_CSN0	GPIO1_A4	EMMC_D4	SFC_CSN0		I/O	I	up	39-65	51	2, 4, 8, 12	8	Date4 of EMMC	EMMC_D4/SFC_CSN0	EMMC_D4/SFC_CSN0
C31	GPIO1_A5/EMMC_D5/SFC_CLK	GPIO1_A5	EMMC_D5	SFC_CLK		I/O	I	up	39-65	51	2, 4, 8, 12	8	Date5 of EMMC	EMMC_D5/SFC_CLK	EMMC_D5/SFC_CLK
B32	GPIO1_A6/EMMC_D6/SPI2_MISO_M0	GPIO1_A6	EMMC_D6	SPI2M0_MISO		I/O	I	up	39-65	51	2, 4, 8, 12	8	Date6 of EMMC	EMMC_D6	EMMC_D6
A33	GPIO1_A7/EMMC_D7/SPI2_CLK_M0	GPIO1_A7	EMMC_D7	SPI2M0_CLK		I/O	I	up	39-65	51	2, 4, 8, 12	8	Date7 of EMMC	EMMC_D7	EMMC_D7
G31	GPIO1_B0/EMMC_PWREN/SPI2_MOSI_M0	GPIO1_B0	EMMC_PWREN	SPI2M0_MOSI		I/O	I	up	39-65	51	2, 4, 8, 12	8			
E31	GPIO1_B1/EMMC_CLKOUT/SPI2_CSN_M0	GPIO1_B1	EMMC_CLKOUT	SPI2M0_CSN		I/O	I	up	39-65	51	2, 4, 8, 12	8	Clk of EMMC	EMMC_CLK	EMMC_CLK
B34	GPIO1_B2/EMMC_CMD	GPIO1_B2	EMMC_CMD			I/O	I	up	39-65	51	2, 4, 8, 12	8	Cmd of EMMC	EMMC_CMD	EMMC_CMD
A35	GPIO1_B3/EMMC_RSTN	GPIO1_B3	EMMC_RSTN			I/O	I	down	39-65	51	2, 4, 8, 12	8	Reset of EMMC	EMMC_RST	EMMC_RST

VCCIO5 (1.8V or 3.3V)															
C27	GPIO1_B4/SPI0_MOSI/I2C2_SCL_M1/UART1_R	GPIO1_B4	SPI0_MOSI	I2C2M1_SCL	UART1_RXM1	I/O	I	up	39-65	51	2, 4, 8, 12	4	SPI bus port 0	SPI0_MOSI	SPI0_MOSI
A27	GPIO1_B5/SPI0_MISO/I2C2_SDA_M1/UART1_T	GPIO1_B5	SPI0_MISO	I2C2M1_SDA	UART1_TXM1	I/O	I	up	39-65	51	2, 4, 8, 12	4	SPI bus port 0	SPI0_MISO	SPI0_MISO
G25	GPIO1_B6/SPI0_CSN	GPIO1_B6	SPI0_CSN			I/O	I	up	39-65	51	2, 4, 8, 12	4	SPI bus port 0	SPI0_CSN	SPI0_CSN
E25	GPIO1_B7/SPI0_CLK/PWM5	GPIO1_B7	SPI0_CLK	PWM_5		I/O	I	down	39-65	51	2, 4, 8, 12	4	SPI bus port 0	SPI0_CLK	SPI0_CLK
VCCIO6 (1.8V or 3.3V)															
AJ39	GPIO4_A0/SDMMC0_CMD/TEST_CLK0	GPIO4_A0	SDMMC0_CMD	TEST_CLK0		I/O	I	up	39-65	51	2, 4, 8, 12	8	SDMMC0 command output	SDMMC0_CMD	SDMMC0_CMD
AH38	GPIO4_A1/SDMMC0_CLK	GPIO4_A1	SDMMC0_CLK			I/O	I	down	39-65	51	2, 4, 8, 12	8	SDMMC0 clock output	SDMMC0_CLK	SDMMC0_CLK
AG39	GPIO4_A2/SDMMC0_D0/UART2_TX_M0	GPIO4_A2	SDMMC0_D0	UART2_TXM0		I/O	I	up	39-65	51	2, 4, 8, 12	8	SDMMC0 data port/Uart2_tx_debug	SDMMC0_D0/UART2_TX	SDMMC0_D0/UART2_TX
AE35	GPIO4_A3/SDMMC0_D1/UART2_RX_M0	GPIO4_A3	SDMMC0_D1	UART2_RXM0		I/O	I	up	39-65	51	2, 4, 8, 12	8	SDMMC0 data port/Uart2_rx_debug	SDMMC0_D1/UART2_RX	SDMMC0_D1/UART2_RX
AF38	GPIO4_A4/SDMMC0_D2/JTAG_TCK	GPIO4_A4	SDMMC0_D2	JTAG_TCK		I/O	I	up	39-65	51	2, 4, 8, 12	8	SDMMC0 data port/JTAG TCK for AP	SDMMC0_D2/JTAG_TCK	SDMMC0_D2/JTAG_TCK
AE33	GPIO4_A5/SDMMC0_D3/JTAG_TMS	GPIO4_A5	SDMMC0_D3	JTAG_TMS		I/O	I	up	39-65	51	2, 4, 8, 12	8	SDMMC0 data port/JTAG TMS for AP	SDMMC0_D3/JTAG_TMS	SDMMC0_D3/JTAG_TMS
VCCIO1 (1.8V or 3.3V)															
AR31	GPIO4_A6/SDMMC1_CMD	GPIO4_A6	SDMMC1_CMD			I/O	I	up	39-65	51	2, 4, 8, 12	8	SDMMC1 command output, ,for WIFI module	SDMMC1_CMD	SDMMC1_CMD
AR35	GPIO4_A7/SDMMC1_CLK	GPIO4_A7	SDMMC1_CLK			I/O	I	down	39-65	51	2, 4, 8, 12	8	SDMMC1 clock output, for WIFI module	SDMMC1_CLK	SDMMC1_CLK
AN31	GPIO4_B0/SDMMC1_D0/UART1_RX_M0	GPIO4_B0	SDMMC1_D0	UART1_RXM0		I/O	I	up	39-65	51	2, 4, 8, 12	8	SDMMC1 data port ,for WIFI module	SDMMC1_D0	SDMMC1_D0
AP34	GPIO4_B1/SDMMC1_D1/UART1_TX_M0	GPIO4_B1	SDMMC1_D1	UART1_TXM0		I/O	I	up	39-65	51	2, 4, 8, 12	8	SDMMC1 data port, for WIFI module	SDMMC1_D1	SDMMC1_D1
AT38	GPIO4_B2/SDMMC1_D2/UART1_CTS	GPIO4_B2	SDMMC1_D2	UART1_CTS		I/O	I	up	39-65	51	2, 4, 8, 12	8	SDMMC1 data port, for WIFI module	SDMMC1_D2	SDMMC1_D2
AP38	GPIO4_B3/SDMMC1_D3/UART1_RTS	GPIO4_B3	SDMMC1_D3	UART1_RTS		I/O	I	up	39-65	51	2, 4, 8, 12	8	SDMMC1 data port, for WIFI module	SDMMC1_D3	SDMMC1_D3
AN33	GPIO4_B4/UART4_RX/SPI1_CLK_M0	GPIO4_B4	UART4_RX	SPI1_CLK	PCIUSB_DEBUG0	I/O	I	up	39-65	51	2, 4, 8, 12	4	UART4 serial port,for BT module	UART4_RX	UART4_RX
AJ29	GPIO4_B5/UART4_TX/SPI1_MOSI_M0	GPIO4_B5	UART4_TX	SPI1_MOSI	PCIUSB_DEBUG1	I/O	I	up	39-65	51	2, 4, 8, 12	4	UART4 serial port,for BT module	UART4_TX	UART4_TX
AU39	GPIO4_B6/UART4_CTS/SPI1_CSN0_M0	GPIO4_B6	UART4_CTS	SPI1_CSN0	PCIUSB_DEBUG2	I/O	I	up	39-65	51	2, 4, 8, 12	4	UART4 serial port,for BT module	UART4_CTS	UART4_CTS
AR33	GPIO4_B7/UART4_RTS/SPI1_MISO_M0	GPIO4_B7	UART4_RTS	SPI1_MISO	PCIUSB_DEBUG3	I/O	I	up	39-65	51	2, 4, 8, 12	4	UART4 serial port,for BT module	UART4_RTS	UART4_RTS
AL33	GPIO4_C0/SPI1_CSN1_M0	GPIO4_C0		SPI1_CSN1	PCIUSB_DEBUG4	I/O	I	up	39-65	51	2, 4, 8, 12	4	WIFI function enable	WIFI_REG_ON	WIFI_REG_ON
AR39	GPIO4_C1/I2C5_SCL	GPIO4_C1	I2C5_SCL		PCIUSB_DEBUG5	I/O	I	up	39-65	51	2, 4, 8, 12	4	WIFI module wake up AP	WIFI_WAKE_HOST	WIFI_WAKE_HOST
AL29	GPIO4_C2/I2C5_SDA	GPIO4_C2	I2C5_SDA		PCIUSB_DEBUG6	I/O	I	up	39-65	51	2, 4, 8, 12	4	BT module wake up AP	BT_WAKE_HOST	BT_WAKE_HOST
AL27	GPIO4_C3	GPIO4_C3			PCIUSB_DEBUG7	I/O	I	up	39-65	51	2, 4, 8, 12	4	BT function enable	BT_REG_ON	BT_REG_ON
AL31	GPIO4_C4	GPIO4_C4				I/O	I	up	39-65	51	2, 4, 8, 12	4	AP wake up BT module	HOST_WAKE_BT	HOST_WAKE_BT
VCCIO2 (1.8V or 3.3V)															
AW25	GPIO2_A0/CIF_D12/RGMII_CRS/LCDC_D6	GPIO2_A0	CIF_D12	RGMII_CRS	LCDC_D6	I/O	I	down	39-65	51	2, 4, 8, 12	4	MAC carrier sense detect/Cif D12/Date6 for lcdc	GPIO2_A0/CIF_D12/RGMII_CR S/LCDC_D6	GPIO2_A0/CIF_D12/RGMII_CR S/LCDC_D6
AR19	GPIO2_A1/CIF_D13/RGMII_TXEN/LCDC_D7	GPIO2_A1	CIF_D13	RGMII_TXEN	LCDC_D7	I/O	I	down	39-65	51	2, 4, 8, 12	4	MAC transmit enable/Cif D13/Date7 for lcdc	GPIO2_A1/CIF_D13/RGMII_TXE N/LCDC_D7	GPIO2_A1/CIF_D13/RGMII_TXE N/LCDC_D7
AL19	GPIO2_A2/CIF_D14/RGMII_TXD1/LCDC_D0	GPIO2_A2	CIF_D14	RGMII_TXD1	LCDC_D0	I/O	I	down	39-65	51	2, 4, 8, 12	4	MAC transmit data/Cif D14/Date0 for lcdc	GPIO2_A2/CIF_D14/RGMII_TXD 1/LCDC_D0	GPIO2_A2/CIF_D14/RGMII_TXD 1/LCDC_D0
AJ21	GPIO2_A3/CIF_D15/RGMII_TXD0/LCDC_D1	GPIO2_A3	CIF_D15	RGMII_TXD0	LCDC_D1	I/O	I	down	39-65	51	2, 4, 8, 12	4	MAC transmit data/Cif D15/Date1 for lcdc	GPIO2_A3/CIF_D15/RGMII_TXD 0/LCDC_D1	GPIO2_A3/CIF_D15/RGMII_TXD 0/LCDC_D1
AN21	GPIO2_A4/CIF_D2/RGMII_RXD0/SPI2_MISO_M	GPIO2_A4	CIF_D2	RGMII_RXD0	SPI2M1_MISO	I/O	I	down	39-65	51	2, 4, 8, 12	4	MAC receive data/Cif D2/SPI bus port 2	GPIO2_A4/CIF_D2/RGMII_RXD 0/SPI2_MISO_M1	GPIO2_A4/CIF_D2/RGMII_RXD 0/SPI2_MISO_M1
AL21	GPIO2_A5/CIF_D3/RGMII_RXD1/SPI2_CLK_M1	GPIO2_A5	CIF_D3	RGMII_RXD1	SPI2M1_CLK	I/O	I	down	39-65	51	2, 4, 8, 12	4	MAC receive data/Cif D3/SPI bus port 2	GPIO2_A5/CIF_D3/RGMII_RXD 1/SPI2_CLK_M1	GPIO2_A5/CIF_D3/RGMII_RXD 1/SPI2_CLK_M1
AV26	GPIO2_A6/CIF_D4/RGMII_RXER/SPI2_MOSI_M	GPIO2_A6	CIF_D4	RGMII_RXER	SPI2M1_MOSI	I/O	I	down	39-65	51	2, 4, 8, 12	4	MAC receive error/Cif D4/SPI bus port 2	GPIO2_A6/CIF_D4/RGMII_RXE R/SPI2_MOSI_M1	GPIO2_A6/CIF_D4/RGMII_RXE R/SPI2_MOSI_M1
AU25	GPIO2_A7/CIF_D5/RGMII_RXDV/SPI2_CSN_M1	GPIO2_A7	CIF_D5	RGMII_RXDV	SPI2M1_CSN	I/O	I	down	39-65	51	2, 4, 8, 12	4	MAC receive data valid/Cif D5/SPI bus port 2	GPIO2_A7/CIF_D5/RGMII_RXD V/SPI2_CSN_M1	GPIO2_A7/CIF_D5/RGMII_RXD V/SPI2_CSN_M1
AW29	GPIO2_B0/CIF_D6/RGMII_MDIO	GPIO2_B0	CIF_D6	RGMII_MDIO		I/O	I	down	39-65	51	2, 4, 8, 12	4	MAC management command and data/Cif D6	GPIO2_B0/CIF_D6/RGMII_MDI O	GPIO2_B0/CIF_D6/RGMII_MDI O
AW27	GPIO2_B1/CIF_D7/RGMII_COL	GPIO2_B1	CIF_D7	RGMII_COL		I/O	I	down	39-65	51	2, 4, 8, 12	4	MAC collision detect/Cif D7	GPIO2_B1/CIF_D7/RGMII_COL	GPIO2_B1/CIF_D7/RGMII_COL
AW31	GPIO2_B2/CIF_D8/RGMII_MDC/LCDC_HSYNC	GPIO2_B2	CIF_D8	RGMII_MDC	LCDC_HSYNCM0	I/O	I	down	39-65	51	2, 4, 8, 12	4	MAC management clock/Cif D8/Hsyncn for lcdc	GPIO2_B2/CIF_D8/RGMII_MDC/ LCDC_HSYNC	GPIO2_B2/CIF_D8/RGMII_MDC/ LCDC_HSYNC
AV28	GPIO2_B3/CIF_D9/RGMII_TXD3/LCDC_VSYNC	GPIO2_B3	CIF_D9	RGMII_TXD3	LCDC_VSYNCM0	I/O	I	down	39-65	51	2, 4, 8, 12	4	MAC transmit data/Cif D9/Vsync for lcdc	GPIO2_B3/CIF_D9/RGMII_TXD3 /LCDC_VSYNC	GPIO2_B3/CIF_D9/RGMII_TXD3 /LCDC_VSYNC
AV30	GPIO2_B4/CIF_VSYNC/RGMII_TXD2	GPIO2_B4	CIF_VSYNC	RGMII_TXD2		I/O	I	down	39-65	51	2, 4, 8, 12	4	MAC transmit data/Cif vsync	GPIO2_B4/CIF_VSYNC/RGMII_ TXD2	GPIO2_B4/CIF_VSYNC/RGMII_ TXD2
AV32	GPIO2_B5/CIF_HREF/RGMII_RXD2	GPIO2_B5	CIF_HREF	RGMII_RXD2		I/O	I	down	39-65	51	2, 4, 8, 12	4	MAC receive data/Cif href	GPIO2_B5/CIF_HREF/RGMII_R XD2	GPIO2_B5/CIF_HREF/RGMII_R XD2
AU31	GPIO2_B6/CIF_CLKIN/RGMII_RXD3	GPIO2_B6	CIF_CLKIN	RGMII_RXD3		I/O	I	down	39-65	51	2, 4, 8, 12	4	MAC receive data/Cif clkln	GPIO2_B6/CIF_CLKIN/RGMII_R XD3	GPIO2_B6/CIF_CLKIN/RGMII_R XD3

AR27	GPIO2_B7/CIF_CLKOUT/RGMII_CLK	GPIO2_B7	CIF_CLKOUT	RGMII_CLK		I/O	I	down	39-65	51	2, 4, 8, 12	4	MAC reference clock in or output/Cif clkout	GPIO2_B7/CIF_CLKOUT/RGMII_CLK	GPIO2_B7/CIF_CLKOUT/RGMII_CLK
AR25	GPIO2_C0/CIF_D0/CLKOUT_ETHERNET	GPIO2_C0	CIF_D0	CLK_OUT_ETHERNET		I/O	I	down	39-65	51	2, 4, 8, 12	4	MAC clkout/Cif D0	GPIO2_C0/CIF_D0/CLKOUT_ETHERNET	GPIO2_C0/CIF_D0/CLKOUT_ETHERNET
AN27	GPIO2_C1/CIF_D1/RGMII_TXCLK	GPIO2_C1	CIF_D1	RGMII_TXCLK		I/O	I	down	39-65	51	2, 4, 8, 12	4	MAC transmit clock/Cif D1	GPIO2_C1/CIF_D1/RGMII_TXCLK	GPIO2_C1/CIF_D1/RGMII_TXCLK
AN25	GPIO2_C2/CIF_D10/RGMII_RXCLK/LCDC_D2	GPIO2_C2	CIF_D10	RGMII_RXCLK	LCDC_D2	I/O	I	down	39-65	51	2, 4, 8, 12	4	MAC receive clock/Cif D10/Date2 for lcdc	GPIO2_C2/CIF_D10/RGMII_RXCLK/LCDC_D2	GPIO2_C2/CIF_D10/RGMII_RXCLK/LCDC_D2
AL23	GPIO2_C3/CIF_D11/LCDC_D3	GPIO2_C3	CIF_D11		LCDC_D3	I/O	I	down	39-65	51	2, 4, 8, 12	4	Cif D11/Date3 for lcdc	GPIO2_C3/CIF_D11/LCDC_D3	GPIO2_C3/CIF_D11/LCDC_D3
AL25	GPIO2_C4/LCDC_D4	GPIO2_C4			LCDC_D4	I/O	I	down	39-65	51	2, 4, 8, 12	4	Date4 for lcdc	GPIO2_C4/LCDC_D4	GPIO2_C4/LCDC_D4
AW35	GPIO2_C5/LCDC_D5	GPIO2_C5			LCDC_D5	I/O	I	down	39-65	51	2, 4, 8, 12	4	Date5 for lcdc	GPIO2_C5/LCDC_D5	GPIO2_C5/LCDC_D5
AW33	GPIO2_C6/LCDC_CLK	GPIO2_C6			LCDC_CLK	I/O	I	down	39-65	51	2, 4, 8, 12	4	Clk for lcdc	GPIO2_C6/LCDC_CLK	GPIO2_C6/LCDC_CLK
AV34	GPIO2_C7/LCDC_DEN	GPIO2_C7			LCDC_DEN	I/O	I	down	39-65	51	2, 4, 8, 12	4	Den for lcdc	GPIO2_C7/LCDC_DEN	GPIO2_C7/LCDC_DEN
AW37	GPIO2_D0/I2C3_SCL/UART2_TX_M1	GPIO2_D0	I2C3_SCL	UART2_TXM1		I/O	I	up	39-65	51	2, 4, 8, 12	2	I2C serial port 3/UART serial port3	GPIO2_D0/I2C3_SCL/UART2_TX_M1	GPIO2_D0/I2C3_SCL/UART2_TX_M1
AV36	GPIO2_D1/I2C3_SDA/UART2_RX_M1	GPIO2_D1	I2C3_SDA	UART2_RXM1		I/O	I	up	39-65	51	2, 4, 8, 12	2	I2C serial port 3/UART serial port3	GPIO2_D1/I2C3_SDA/UART2_RX_M1	GPIO2_D1/I2C3_SDA/UART2_RX_M1
<b>VCCIO3 (1.8V or 3.3V)</b>															
U39	GPIO3_A0/I2S1_LRCK	GPIO3_A0	I2S1_2CH_LRCK			I/O	I	down	39-65	51	2, 4, 8, 12	4	I2S 1 port, for audio codec of rk809-2 module	I2S1_LRCK	I2S1_LRCK
V38	GPIO3_A1/I2S1_SCL/PWM6	GPIO3_A1	I2S1_2CH_SCL	PWM_6		I/O	I	down	39-65	51	2, 4, 8, 12	4	I2S 1 port, for audio codec of rk809-2 module	I2S1_SCL	I2S1_SCL
U35	GPIO3_A2/I2S1_MCLK/PWM7	GPIO3_A2	I2S1_2CH_MCLK	PWM_7		I/O	I	down	39-65	51	2, 4, 8, 12	4	I2S 1 port, for audio codec of rk809-2 module	I2S1_MCLK	I2S1_MCLK
W37	GPIO3_A3/I2S1_SDO/UART2_TX_M2	GPIO3_A3	I2S1_2CH_SDO	UART2_TXM2		I/O	I	down	39-65	51	2, 4, 8, 12	4	I2S 1 port, for audio codec of rk809-2 module	I2S1_SDO	I2S1_SDO
W39	GPIO3_A4/I2S1_SDI/UART2_RX_M2	GPIO3_A4	I2S1_2CH_SDI	UART2_RXM2		I/O	I	down	39-65	51	2, 4, 8, 12	4	I2S 1 port, for audio codec of rk809-2 module	I2S1_SDI	I2S1_SDI
<b>VCCIO4 (1.8V or 3.3V)</b>															
AA31	GPIO3_A5/I2S0_SDI3/PDM_SDI3	GPIO3_A5	I2S0_8CH_SDI3	PDM_SDI3		I/O	I	down	39-65	51	2, 4, 8, 12	8	I2S 0 port, for mic-array board	I2S0_SDI3/PDM_SDI3	I2S0_SDI3/PDM_SDI3
W35	GPIO3_A6/I2S0_SDI2/PDM_SDI2	GPIO3_A6	I2S0_8CH_SDI2	PDM_SDI2		I/O	I	down	39-65	51	2, 4, 8, 12	8	I2S 0 port, for mic-array board	I2S0_SDI2/PDM_SDI2	I2S0_SDI2/PDM_SDI2
AC29	GPIO3_A7/I2S0_SDI1/PDM_SDI1	GPIO3_A7	I2S0_8CH_SDI1	PDM_SDI1		I/O	I	down	39-65	51	2, 4, 8, 12	8	I2S 0 port, for mic-array board	I2S0_SDI1/PDM_SDI1	I2S0_SDI1/PDM_SDI1
Y38	GPIO3_B0/I2S0_SCL_RX/PDM_CLK0	GPIO3_B0	I2S0_8CH_SCLRX	PDM_CLK0		I/O	I	down	39-65	51	2, 4, 8, 12	8	I2S 0 port, for mic-array board	I2S0_SCL_RX/PDM_CLK0	I2S0_SCL_RX/PDM_CLK0
AB38	GPIO3_B1/I2S0_LRCK_RX/PDM_CLK1	GPIO3_B1	I2S0_8CH_LRCKRX	PDM_CLK1		I/O	I	down	39-65	51	2, 4, 8, 12	8	I2S 0 port, for mic-array board	I2S0_LRCK_RX/PDM_CLK1	I2S0_LRCK_RX/PDM_CLK1
AC33	GPIO3_B2/I2S0_SDO3/ISP_FLASHTRIGIN/LCD	GPIO3_B2	I2S0_8CH_SDO3	ISP_FLASHTRIGIN	LCDC_HSYNCM1	I/O	I	down	39-65	51	2, 4, 8, 12	8	I2S 0 port, for mic-array board	I2S0_SDO3	I2S0_SDO3
AC31	GPIO3_B3/I2S0_SDO2/I2C2_SCL_M0/LCDC_VS	GPIO3_B3	I2S0_8CH_SDO2	I2C2M0_SCL	LCDC_VSYNCM1	I/O	I	down	39-65	51	2, 4, 8, 12	8	I2S 0 port, for mic-array board	I2S0_SDO2	I2S0_SDO2
AC35	GPIO3_B4/I2S0_SDO1/I2C2_SDA_M0	GPIO3_B4	I2S0_8CH_SDO1	I2C2M0_SDA		I/O	I	down	39-65	51	2, 4, 8, 12	8	I2S 0 port, for mic-array board	I2S0_SDO1	I2S0_SDO1
AC39	GPIO3_B5/I2S0_MCLK/ISP_SHUTTEREN	GPIO3_B5	I2S0_8CH_MCLK	ISP_SHUTTEREN		I/O	I	down	39-65	51	2, 4, 8, 12	8	I2S 0 port, for mic-array board	I2S0_MCLK	I2S0_MCLK
AE39	GPIO3_B6/I2S0_LRCK_TX/ISP_FLASHTRIGOUT	GPIO3_B6	I2S0_8CH_LRCKTX	ISP_FLASHTRIGOUT		I/O	I	down	39-65	51	2, 4, 8, 12	8	I2S 0 port, for mic-array board	I2S0_LRCK_TX	I2S0_LRCK_TX
AD38	GPIO3_B7/I2S0_SCL_TX/ISP_PRELIGHTTRIG	GPIO3_B7	I2S0_8CH_SCLTX	ISP_PRELIGHTTRIG		I/O	I	down	39-65	51	2, 4, 8, 12	8	I2S 0 port, for mic-array board	I2S0_SCL_TX	I2S0_SCL_TX
AC37	GPIO3_C0/I2S0_SDO0/ISP_SHUTTERTRIG	GPIO3_C0	I2S0_8CH_SDO0	ISP_SHUTTERTRIG		I/O	I	down	39-65	51	2, 4, 8, 12	8	I2S 0 port, for mic-array board	I2S0_SDO0	I2S0_SDO0
AA39	GPIO3_C1/I2S0_SDI0/PDM_SDI0	GPIO3_C1	I2S0_8CH_SDI0	PDM_SDI0		I/O	I	down	39-65	51	2, 4, 8, 12	8	I2S 0 port, for mic-array board	I2S0_SDI0/PDM_SDI0	I2S0_SDI0/PDM_SDI0
<b>VCCIO7 (1.8V or 3.3V)</b>															
AN37	GPIO3_C2/LCDC_D8/UART5_TX/I2C4_SCL	GPIO3_C2	LCDC_D8	UART5_TX	I2C4_SCL	I/O	I	down	39-65	51	2, 4, 8, 12	8	Date8 for lcdc/UART5 serial port/I2C serial port4	GPIO3_C2/LCDC_D8/UART5_TX/I2C4_SCL	GPIO3_C2/LCDC_D8/UART5_TX/I2C4_SCL
AM38	GPIO3_C3/LCDC_D9/UART5_RX/I2C4_SDA	GPIO3_C3	LCDC_D9	UART5_RX	I2C4_SDA	I/O	I	down	39-65	51	2, 4, 8, 12	8	Date9 for lcdc/UART5 serial port/I2C serial port4	GPIO3_C3/LCDC_D9/UART5_RX/I2C4_SDA	GPIO3_C3/LCDC_D9/UART5_RX/I2C4_SDA
AL39	GPIO3_C4/LCDC_D10/UART6_TX	GPIO3_C4	LCDC_D10	UART6_TX		I/O	I	down	39-65	51	2, 4, 8, 12	8	Date10 for lcdc/UART serial port6	GPIO3_C4/LCDC_D10/UART6_TX	GPIO3_C4/LCDC_D10/UART6_TX
AJ33	GPIO3_C5/LCDC_D11/UART6_RX	GPIO3_C5	LCDC_D11	UART6_RX		I/O	I	down	39-65	51	2, 4, 8, 12	8	Date11 for lcdc/UART serial port6	GPIO3_C5/LCDC_D11/UART6_RX	GPIO3_C5/LCDC_D11/UART6_RX
AN39	GPIO3_C6/LCDC_D12/UART7_TX	GPIO3_C6	LCDC_D12	UART7_TX		I/O	I	down	39-65	51	2, 4, 8, 12	8	Date12 for lcdc/UART serial port7	GPIO3_C6/LCDC_D12/UART7_TX	GPIO3_C6/LCDC_D12/UART7_TX
AL35	GPIO3_C7/LCDC_D13/UART7_RX/SPI1_CLK_M	GPIO3_C7	LCDC_D13	UART7_RX	SPI1M1_CLK	I/O	I	down	39-65	51	2, 4, 8, 12	8	Date13 for lcdc/UART serial port7/SPI serial port1	GPIO3_C7/LCDC_D13/UART7_RX/SPI1_CLK_M1	GPIO3_C7/LCDC_D13/UART7_RX/SPI1_CLK_M1
AJ35	GPIO3_D0/LCDC_D14/PWM8/SPI1_MOSI_M1	GPIO3_D0	LCDC_D14	PWM_8	SPI1M1_MOSI	I/O	I	down	39-65	51	2, 4, 8, 12	8	Date14 for lcdc/pwm8/SPI serial port1	GPIO3_D0/LCDC_D14/PWM8/SPI1_MOSI_M1	GPIO3_D0/LCDC_D14/PWM8/SPI1_MOSI_M1
AG31	GPIO3_D1/LCDC_D15/PWM9/SPI1_CSN0_M1	GPIO3_D1	LCDC_D15	PWM_9	SPI1M1_CSN0	I/O	I	down	39-65	51	2, 4, 8, 12	8	Date15 for lcdc/pwm9/SPI serial port1	GPIO3_D1/LCDC_D15/PWM9/SPI1_CSN0_M1	GPIO3_D1/LCDC_D15/PWM9/SPI1_CSN0_M1
AK38	GPIO3_D2/LCDC_D16/PWM10/SPI1_MISO_M1	GPIO3_D2	LCDC_D16	PWM_10	SPI1M1_MISO	I/O	I	down	39-65	51	2, 4, 8, 12	8	Date16 for lcdc/pwm10/SPI serial port1	GPIO3_D2/LCDC_D16/PWM10/SPI1_MISO_M1	GPIO3_D2/LCDC_D16/PWM10/SPI1_MISO_M1
AJ37	GPIO3_D3/LCDC_D17/PWM11/SPI1_CSN1_M1	GPIO3_D3	LCDC_D17	PWM_11	SPI1M1_CSN1	I/O	I	down	39-65	51	2, 4, 8, 12	8	Date17 for lcdc/pwm11/SPI serial port1	GPIO3_D3/LCDC_D17/PWM11/SPI1_CSN1_M1	GPIO3_D3/LCDC_D17/PWM11/SPI1_CSN1_M1

ADC_AVDD(1.8V only)															
W31	ADC_IN0	ADC_IN0				A	I	N/A	N/A	N/A			Hardware ID detect	ADC0_HW_ID1	ADC0_HW_ID1
U31	ADC_IN1	ADC_IN1				A	I	N/A	N/A	N/A					
W33	ADC_IN2	ADC_IN2				A	I	N/A	N/A	N/A			Key array detect	ADC2_KEY_IN	ADC2_KEY_IN
U33	ADC_IN3	ADC_IN3				A	I	N/A	N/A	N/A			headphone key detect	ADC3_HP_HOOK	ADC3_HP_HOOK
<b>Notes1:</b> ①:Type: I = input, O = output, I/O = input/output (bidirectional), A = Analog ②:Output Drive Unit is mA, only Digital IO has driver strength value; ③:Def: I = input without any pull resistor, O = output without any pull resistor; ④:INT: interrupt															